

Design 1

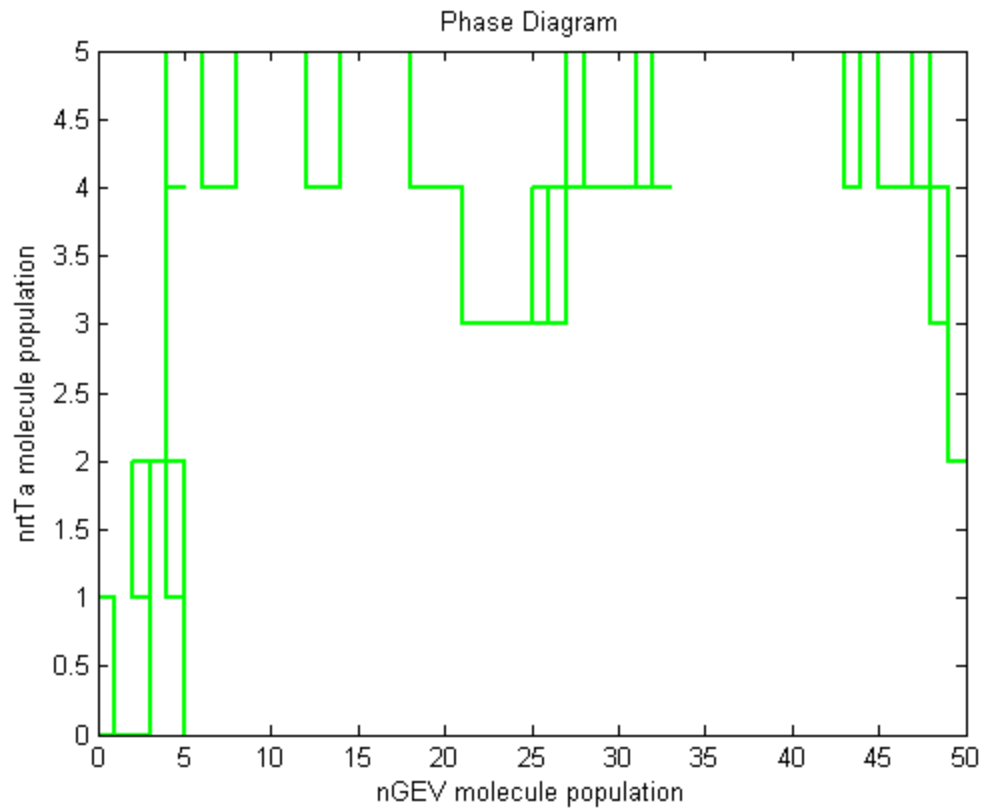


Figure 1. Phase Diagram of nrtTa molecules vs nGEV molecules following a simulation of the first design of the tristable-switch over 10000 time-steps. Initial molecule populations were 5 aTc and 50 beta. Expression of GEV and rtTa is measured by the number of nGEV and nrtTa molecules found in the cell.

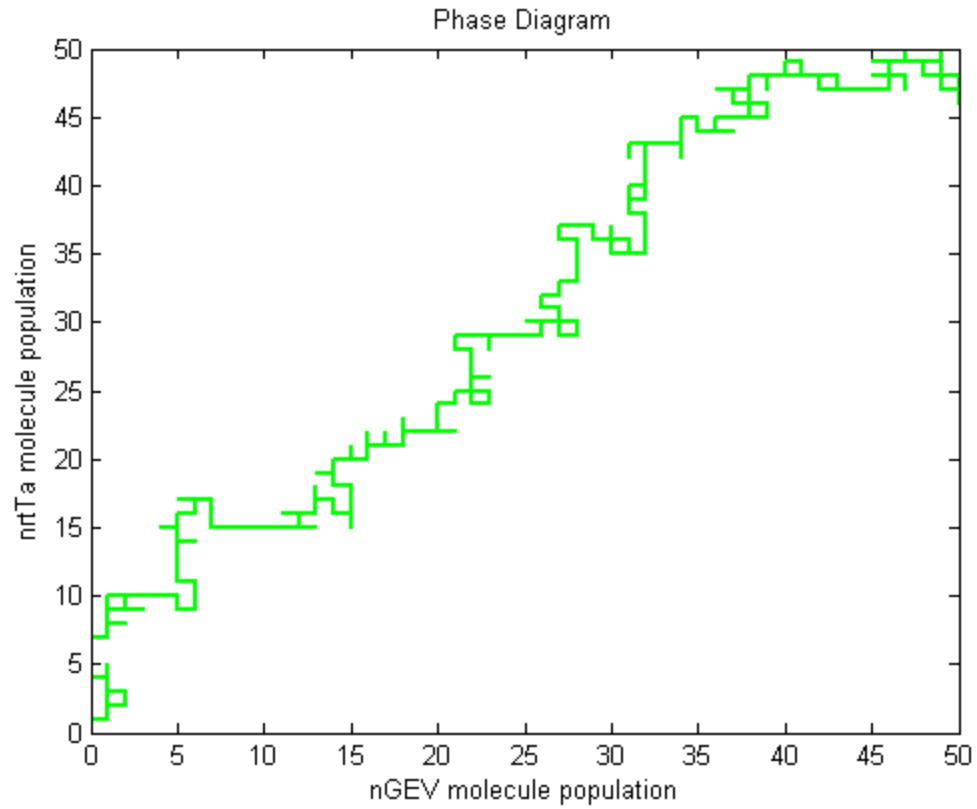


Figure 2. Phase Diagram of nrtTa molecules vs nGEV molecules following a simulation of the first design of the tristable-switch over 10000 time-steps. Initial molecule populations were 50 aTc and 50 beta. Expression of GEV and rtTa is measured by the number of nGEV and nrtTa molecules found in the cell.

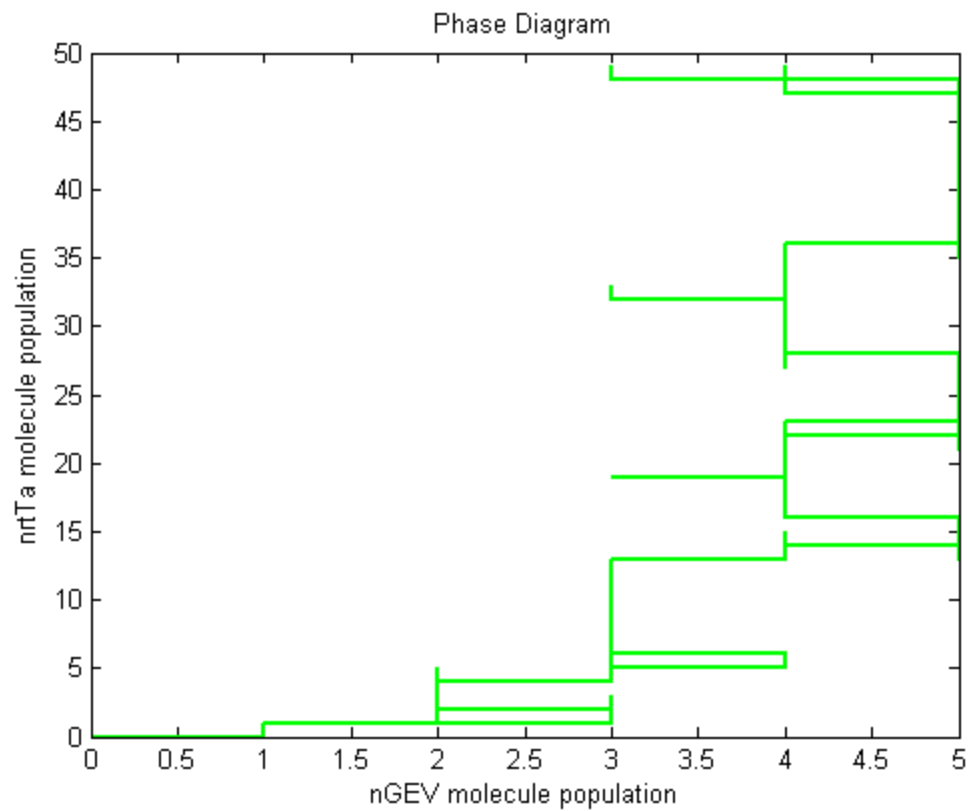


Figure 3. Phase Diagram of nrtTa molecules vs nGEV molecules following a simulation of the first design of the tristable-switch over 10000 time-steps. Initial molecule populations were 50 aTc and 5 beta. Expression of GEV and rtTa is measured by the number of nGEV and nrtTa molecules found in the cell.

Design 2

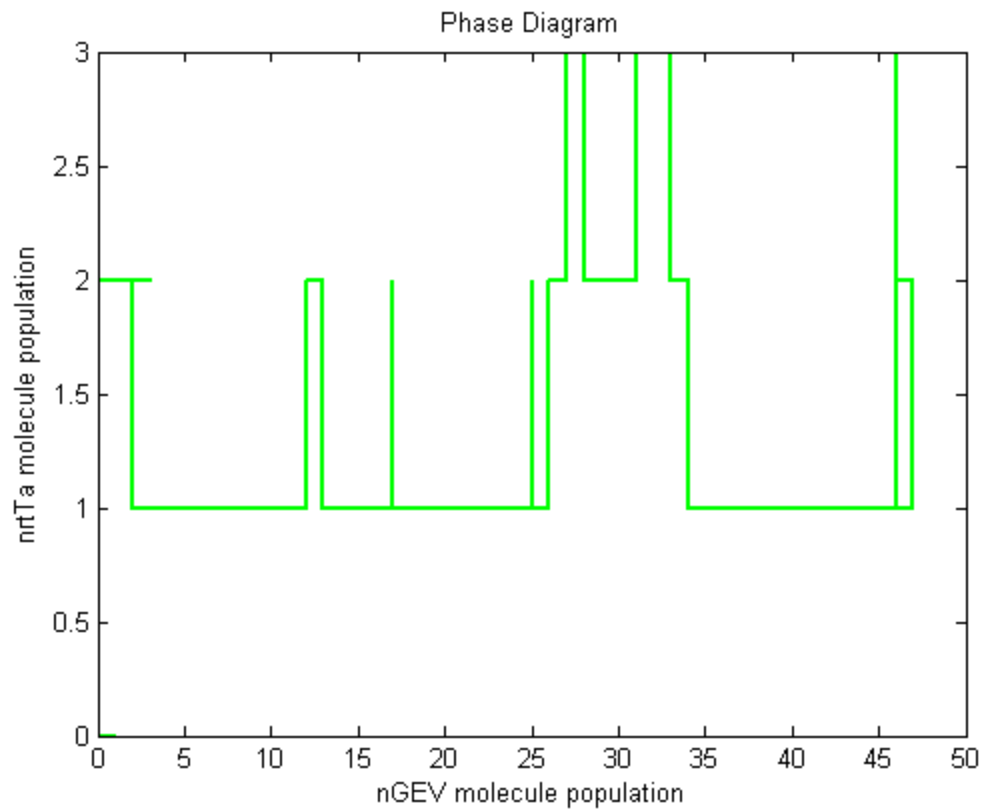


Figure 4. Phase Diagram of nrtTa molecules vs nGEV molecules following a simulation of the first design of the tristable-switch over 10000 time-steps. Initial molecule populations were 5 aTc and 50 beta. Expression of GEV and rtTa is measured by the number of nGEV and nrtTa molecules found in the cell.

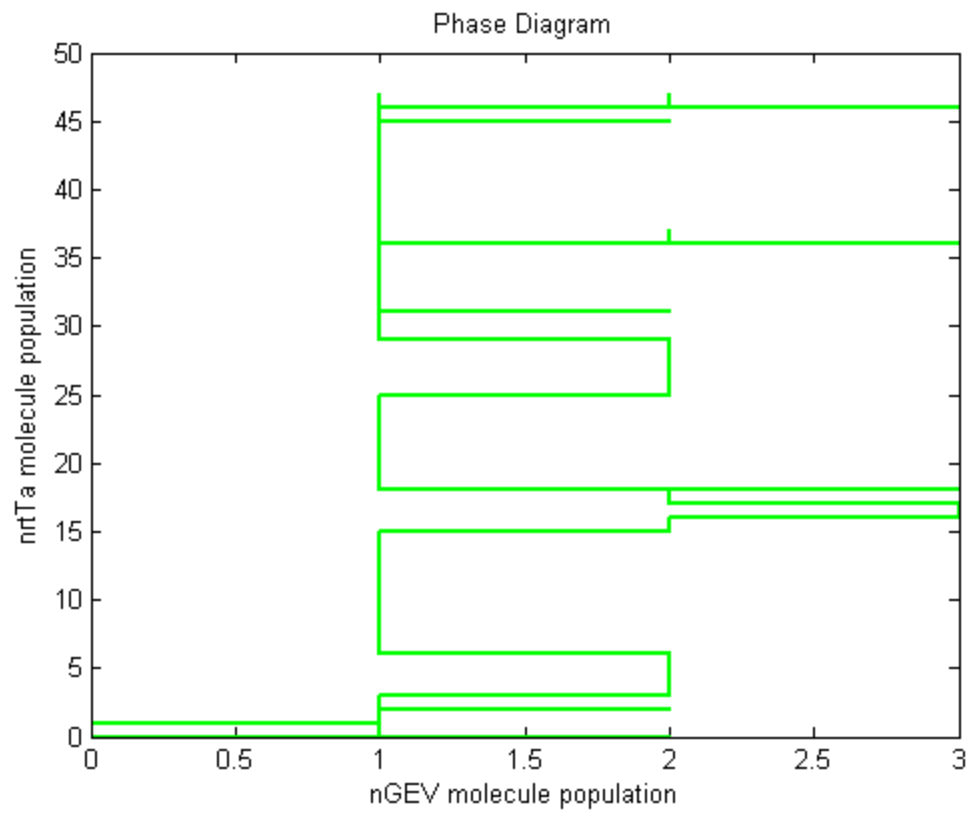


Figure 5. Phase Diagram of nrtTa molecules vs nGEV molecules following a simulation of the second design of the tristable-switch over 10000 time-steps. Initial molecule populations were 50 aTc and 5 beta. Expression of GEV and rTa is measured by the number of nGEV and nrtTa molecules found in the cell.

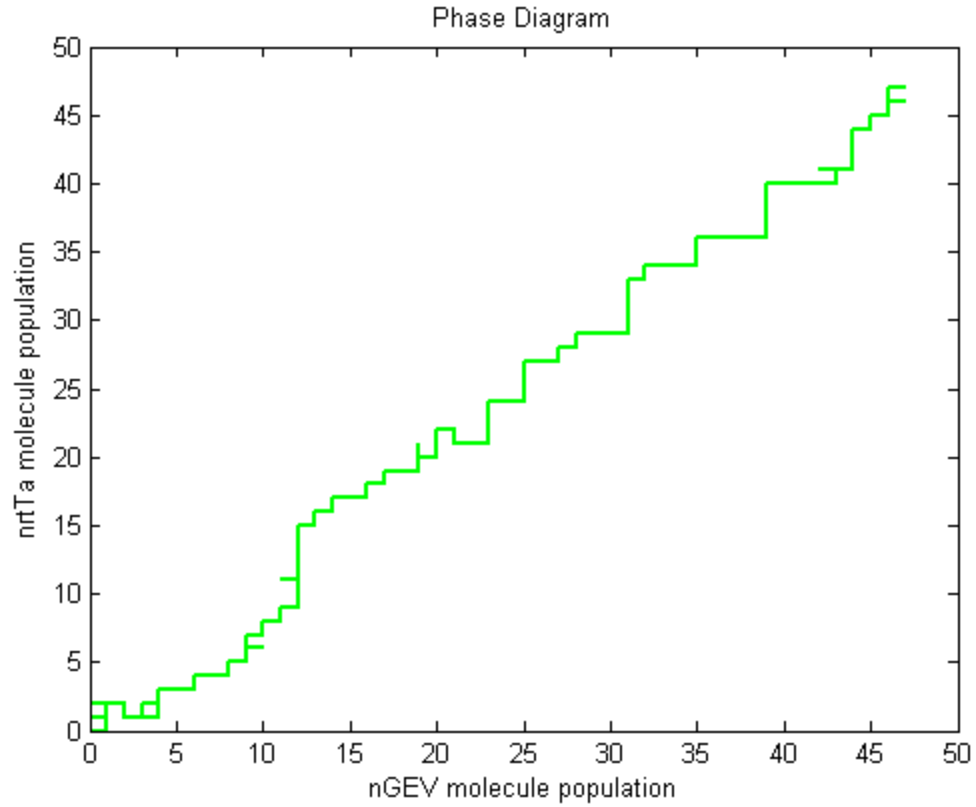


Figure 6. Phase Diagram of nrtTa molecules vs nGEV molecules following a simulation of the second design of the tristable-switch over 10000 time-steps. Initial molecule populations were 50 aTc and 50 beta. Expression of GEV and rTta is measured by the number of nGEV and nrtTa molecules found in the cell.